

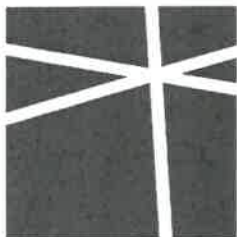
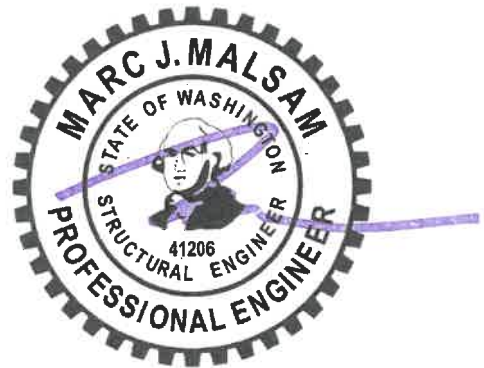
REVISED STRUCTURAL CALCULATIONS FOR:

# PLAN MN472

7119 80TH AVE SE  
MERCER ISLAND, WA 98040

ARCHITECT: MN CUSTOM HOMES

FEBRUARY 9, 2024



**MALSAM  
TSANG**  
STRUCTURAL  
ENGINEERING

VERTICAL ANALYSIS -  
CRAWLSPACE FRAMING

DECK JOISTS

CASE 2

$L = 8$

$W = 0.08 \left(\frac{16}{12}\right) = 0.11$

$R = 0.43$        $f_b = 0.48$

$M = 0.85$        $f_v = 47.0$

$V = 0.43$        $\Delta = 0.08"$

$\frac{L}{1263}$

CASE 3

$L = 8$

$A = 2$

$W = 0.08 \left(\frac{16}{12}\right) = 0.11$

$R_L = 0.41$        $f_b = 0.43/0.12$

$R_A = 0.68$        $f_v = 51.0$

$M = 0.77/-0.21$        $\Delta = 0.07"/$

$V = 0.47$        $0.00"$

$\frac{L}{716}$

2x10s AT 16" OC

DECK HEADER

(C1) #101

$L = 5.25$

$W = 0.08(2) + 0.08\left(\frac{8}{2}\right) = 0.48$

$R = 1.26$        $f_b = 0.40$

$M = 1.65$        $f_v = 59.00$

$V = 1.26$        $\Delta = 0.02"$

$\frac{L}{2864}$

4x10

FOOTING @ DECK

$P = (2) 1.26 K = 2.52 K$

18" DIAMETER PLINTH

$[(9"/12)^2 * 3.14] * 1.5 KSF = 2.65 K \text{ ok}$



122 SOUTH JACKSON ST  
SUITE 210  
SEATTLE, WA 98104  
T 206.789.6038  
MALSAM-TSANG.COM

MN 472 REV 2

PROJECT

2 02/09/24

DATE

0444-2023-09

PROJECT NO

AAM

DESIGN

V7

SHEET